Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An apparatus, comprising:

a network interface to communicate frames of information in accordance with a wireless protocol; and

a frame authentication module operatively responsive to said network interface, said frame authentication module to authenticate multiple frames communicated by said network interface, with each frame containing authentication information in a spare extension field, or encode ~~multiple frames~~ each frame with authentication information if the ~~frames do~~ frame does not include authentication information.

2. (Previously Presented) The apparatus of claim 1, wherein said network interface comprises a network interface operable with a Universal Mobile Telecommunication System.

3. (Currently Amended) The apparatus of claim 1, wherein said network interface comprises a network interface configured in accordance with one of an Iub ~~Specification~~ interface protocol and an Iur ~~Specification~~ interface protocol.

4. (Currently Amended) The apparatus of claim 1, wherein said wireless protocol comprises a framing protocol defined by one of an Iub ~~Specification~~ interface protocol and an Iur ~~Specification~~ interface protocol.

5. (Original) The apparatus of claim 1, wherein said authentication module comprises:

an authentication encoding module to encode each frame with authentication information; and

an authentication decoding module to authenticate each frame using said authentication information.

6. (Previously Presented) The apparatus of claim 5, wherein said authentication encoding module generates said authentication information using an authentication key, data from said frame, and a change parameter.

7. (Currently Amended) A system, comprising:

a node B system having a first network interface;

a first radio network controller to communicate with said node B system, said first radio network controller having a second network interface; and

a frame authentication module for each of said first and second network interfaces, said frame authentication module to authenticate multiple frames communicated between said first and second interfaces, with each frame containing authentication information in a spare extension field, or encode ~~multiple frames~~ each

frame with authentication information if the ~~frames do~~ frame does not include authentication information.

8. (Previously Presented) The system of claim 7, wherein said network interfaces each comprise network interfaces operable with a Universal Mobile Telecommunication System.

9. (Currently Amended) The system of claim 7, wherein said network interface comprises a network interface configured in accordance with one of an Iub ~~Specification~~ interface protocol and an Iur ~~Specification~~ interface protocol.

10. (Original) The system of claim 7, wherein each frame authentication module comprises:

an authentication encoding module to encode each frame with authentication information; and

an authentication decoding module to authenticate each frame using said authentication information.

11. (Original) The system of claim 10, wherein said authentication encoding module generates said authentication information using an authentication key, data from said frame, and a change parameter.

12. (Original) The system of claim 7, further comprising:

a second radio network controller to communicate with said first radio network controller, said second radio network controller having a third network interface; and

a frame authentication module for said third network interface, said frame authentication module to authenticate frames communicated between said second and third interfaces.

13. (Previously Presented) A method, comprising:

receiving multiple frames of information over a wireless medium;

determining whether each frame includes authentication information in a spare extension field;

authenticating each frame using said authentication information; and

encoding each frame with authentication information if said frame does not include said authentication information.

14. (Previously Presented) The method of claim 13, wherein said authenticating comprises:

retrieving an authentication key;

duplicating said authentication information using said authentication key;

retrieving said authentication information from each frame;

comparing said duplicated authentication information with said retrieved authentication information; and

authenticating each frame in accordance with said comparison.

15. (Previously Presented) The method of claim 13, wherein said encoding comprises:

generating said authentication information; and

storing said authentication information in a spare extension field of each frame.

16. (Previously Presented) The method of claim 15, wherein said generating comprises:

retrieving an authentication key;

retrieving data from each frame;

retrieving a change parameter; and

creating said authentication information in accordance with an authentication algorithm using said authentication key, said data, and said change parameter.

17. (Previously Presented) An article comprising:

a storage medium;

said storage medium including stored instructions that, when executed by a processor, result in receiving multiple frames of information over a wireless medium, determining whether each frame includes authentication information in a spare extension field, authenticating each frame using said authentication information, and encoding each frame with authentication information if said frame does not include said authentication information.

18. (Previously Presented) The article of claim 17, wherein the stored instructions, when executed by a processor, further result in said authenticating by retrieving an authentication key, duplicating said authentication information using said authentication key, retrieving said authentication information from each frame, comparing said duplicated authentication information with said retrieved authentication information, and authenticating each frame in accordance with said comparison.

19. (Previously Presented) The article of claim 17, wherein the stored instructions, when executed by a processor, further result in said encoding by generating said authentication information, and storing said authentication information in a spare extension field of each frame.

20. (Previously Presented) The article of claim 19, wherein the stored instructions, when executed by a processor, further result in said generating by retrieving an authentication key, retrieving data from each frame, retrieving a change parameter, and creating said authentication information in accordance with an authentication algorithm using said authentication key, data, and change parameter.